



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/601,406	06/23/2003	Pavel Novak	03685-P0004B	7777
24126 7590 01/02/2008 ST. ONGE STEWARD JOHNSTON & REENS, LLC 986 BEDFORD STREET STAMFORD, CT 06905-5619			EXAMINER DAILEY, THOMAS J	
			ART UNIT 2152	PAPER NUMBER
			MAIL DATE 01/02/2008	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/601,406

Applicant(s)

NOVAK, PAVEL

Examiner

Thomas J. Dailey

Art Unit

2152

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3 December 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8, 10-29, 31-50, 52-71 and 73-82 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10-29, 31-50, 52-71 and 73-82 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/ are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 9, 30, 51, and 72 were cancelled by the amendment filed on December 3, 2007.
2. Claims 1-8, 10-29, 31-50, 52-71, and 73-82 are pending.
3. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 3, 2007 has been entered.

Response to Arguments

4. Applicant's arguments with respect to claims 43, 64, and 82 have been considered but are moot in view of the new ground(s) of rejection.
5. Applicant's arguments filed December 3, 2007 with respect to claims 1, 22, 40, 41, and 42 have been fully considered but they are not persuasive.
6. The examiner reminds the applicant a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended

use, then it meets the claim. Specifically, in regards to the system claims 1, 22, 40, 41, and 42, the claims recite intended uses of the system elements. For example, claim 1, recites, "an input device...**for inputting** a medical command" (line 4), "a controller...**for receiving** the medical command data via said surgical network" (lines 5-6) etc. (Nearly every system claim limitation in the application is of this form, i.e. an element **for** doing something). However, the examiner has treated the claims in view of the prior art irrespective of the intended use limitations, in order to advance prosecution, and encourages the applicant to correct such recitations in a response to the instant Office Action (i.e. eliminating most recitations of "for"). Therefore, the grounds of rejections have changed in regards to claims 1, 22, 40, 41, and 42.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-2, 10-12, 18-23, 31-33, 39-44, 52-54, 60-65, 73-75, and 81-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer et al (US Pat. 5,788,688) hereafter "Bauer," in view of what is well known in the art.

9. As to claim 40, Bauer discloses a system for controlling both primary medical devices, which are part of a surgical network, and ancillary medical devices (Abstract), comprising:

- a surgical network (Fig. 3, label 98);

- an input device, connected to said surgical network, for inputting a medical command (column 3, lines 3-6, and Fig. 3, label 70, connected to surgical network via label 66);

- a controller, connected to said surgical network, for receiving the medical command and generating corresponding medical command data (Fig. 3, label 66 and column 7, lines 25-29);

- at least one primary medical device, connected to said surgical network, having a first translator for receiving the medical command data via said surgical network and translating the medical command data (Fig. 3, labels 44 and 46 (primary medical devices) and column 7, lines 22-25);

- at least one ancillary medical device, in communication with the first translator, for receiving the translated medical command data and carrying out the corresponding medical command (Fig. 3, labels 74 and column 7, lines 19-29, camera receives commands from the ECU (Fig. 3, label 66));

- a data stream, generated by at least one of said at least one ancillary medical devices, with a higher bandwidth than said surgical network is capable of transmitting (column 3, lines 20-25, video image signal reads on data stream, and further column 7, line 60-column 8, line 6, disclose how the video images are

processed, i.e. they are not carried over the same media and do not utilize the same controller that the commands used since they occupy more bandwidth than the commands);

and a second translator, in communication both with said surgical network and with an ancillary network, for receiving and translating said data stream (Fig. 3, label 66, and column 7, line 65-column 8, line 2).

However, Bauer does not explicitly disclose that the at least one ancillary medical device (the endoscopic camera) is in communication with the first translator which receives command data via the surgical network. Rather, command and control information is received from the ECU (Fig. 3, label 66) over the video network and any translating of medical commands is done at the ECU or the camera control unit (Fig. 3, label 49), not on the surgical network.

But, simply transmitting command and control information to Bauer's camera via the surgical network would have been an obvious modification of Bauer. It is well known in the art that remote cameras can receive command and control information over one type of network connection and transmit the video data over a second type, i.e. one of higher bandwidth. Therefore Official Notice (see MPEP 2144.01) is taken that it would have been obvious to one of ordinary skill in the art to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it sends command

and control information to surgical equipment in order to have a common interface to distribute commands of all the devices.

10. As to claim 42, Bauer discloses a system for controlling medical devices, comprising:

- a surgical network (Fig. 3, label 98);

- an input device, connected to said surgical network, for inputting a medical command (column 3, lines 3-6, and Fig. 3, label 70, connected to surgical network via label 66);

- a controller, connected to said surgical network, for receiving the medical command and generating corresponding medical command data (Fig. 3, label 66 and column 7, lines 25-29);

- an ancillary network (column 7, line 60-column 8, line 6, the video network reads on the ancillary network as it is separate from the command and control network of the medical devices in that it uses different transmission media and translators);

- a medical device connected to said surgical network (Fig. 3, label 74 and connected to surgical network via label 66), said device having

- an interface, by which said medical device is in communication with said ancillary network (Fig. 3, labels 49 and 74); and

- a data stream, generated by said medical device and communicated to said ancillary network, with a higher bandwidth than said surgical network is capable

of transmitting (column 3, lines 20-25, video image signal reads on data stream, and further column 7, line 60-column 8, line 6, disclose how the video images are processed, i.e. they are not carried over the same media and do not utilize the same controller that the commands used since they occupy more bandwidth than the commands).

However, Bauer does not disclose the medical device (the endoscopic camera) has a first interface by which said medical device is connected to said surgical network and by which said medical device receives the command data via said surgical network.

But, simply transmitting command and control information to Bauer's camera via the surgical network would have been an obvious modification of Bauer. It is well known in the art that remote cameras can receive command and control information over one type of network connection and transmit the video data over a second type, i.e. one of higher bandwidth. Therefore Official Notice (see MPEP 2144.01) is taken that it would have been obvious to one of ordinary skill in the art to send command and control information to Bauer's endoscopic camera over the same connection (the surgical network) that it sends command and control information to surgical equipment in order to have a common interface to distribute commands of all the devices.

11. As to claims 1, 22, 41, and 43, they are rejected by the same rationale set forth in claim 40's rejection.

12. As to claims 64 and 82, they are rejected by the same rationale set forth in claim 42's rejection.

13. As to claims 2, 23, 44, and 65, Bauer discloses said input device is connected to said controller (column 3, lines 3-10).

14. As to claims 10, 31, 52, and 73, Bauer discloses an ancillary controller connected to said ancillary network (column 7, line 65-column 8, line 2).

15. As to claims 11, 32, 53, and 74, Bauer discloses said ancillary network includes an ancillary input device (Fig. 3, label 74 and column 7, line 60-column 8, line 6).

16. As to claims 12, 33, 54, and 75, Bauer discloses said ancillary input device is connected to said ancillary controller (Fig. 3, label 74 and column 7, line 60-column 8, line 6).

17. As to claims 18, 39, 60, and 81, Bauer discloses said translator includes a lookup table for performing translations (inherent in column 3, lines 6-10).

18. As to claims 19 and 61, Bauer discloses said data stream is video data, the system further comprising a monitor, which is connected to said surgical network, for reproducing said video data as a video image after said video data has been translated by said translator (column 7, line 60-column 8, line 6).
19. As to claims 20 and 62, Bauer discloses the video image is a live video feed (column 7, line 60-column 8, line 6).
20. As to claims 21 and 63, Bauer discloses at least one primary medical device, and the video image is a visual representation of at least one of said primary or ancillary medical devices (column 7, line 60-column 8, line 6).
21. Claims 3-4, 8, 13-14, 17, 24-25, 29, 34-35, 38, 45-46, 50, 55-56, 59, 66-67, 71, 76-77, and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Flach et al (US Pat. 6,589,170), hereafter "Flach."
22. As to claims 3, 24, 45, and 66, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on the translator being in communication with at least one of said at least one ancillary medical devices via an Ethernet connection. Rather, Bauer's invention utilizes a similar means of communication, an 8 bit parallel bus, but chooses not to use Ethernet.

However, Flach discloses a similar invention (Abstract) that utilizes Ethernet to communicate between medical devices, translators, and controllers (column 7, lines 13-25)).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Flach in order to utilize the flexibility and increasing availability of Ethernet based networks.

23. As to claims 4, 25, 46, and 67, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on the translator being in communication with at least one of said at least one ancillary medical devices via a wireless connection.

However, Flach discloses a similar invention (Abstract) that utilizes wireless connections to communicate between ancillary medical devices and their translators and controllers (column 1, lines 14-18).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Flach in order to utilize the flexibility and increasing availability of wireless based networks.

24. As to claims 8, 29, 50, and 71, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

25. As to claims 13, 34, 55, 76, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

26. As to claims 14, 35, 56, 77, they are rejected by the same rationale set forth in claims 4, 25, 46, and 67's rejections.

27. As to claims 17, 38, 59, and 80, they are rejected by the same rationale set forth in claims 3, 24, 45, and 66's rejections.

28. Claims 5, 15, 26, 36, 47, 57, 68, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer and Flach as applied to claims 4, 14, 25, 35, 46, 56, 67, and 77 above, and further in view of what was well known in the art.

29. As to claims 5, 26, 47, and 68, Bauer and Flach disclose the invention substantially with regard to the parent claims 4, 25, 46, and 67, and further disclose wireless capability (Flach, column 1, lines 14-18).

Although Bauer and Flach do not explicitly suggest the use of Bluetooth, Official Notice is taken (MPEP 2144.01) that Bluetooth technology and was a

well-known wireless standard at the time of the applicant's invention was made, which is deployed to enhance wireless communication and user convenience.

Thus it would have been obvious to one of ordinary skill in the art at the time of the invention to take advantage of a known standard to modify the teachings of • Bauer and Flach in order to achieve such benefits.

30. As to claims 15, 36, 57, 78, they are rejected by the same rationale set forth in claims 5, 26, 47, and 68's rejections.

31. Claims 6-7, 16, 27-28, 37, 48-49, 58, 69-70, and 79 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bauer as applied to claims 1, 22, 43, and 64 above, and further in view of Suzuki (US Pat. 7,103,646).

32. As to claims 6, 27, 48, and 69, Bauer discloses the invention substantially with regard to the parent claims 1, 22, 43, and 64, but is silent on said surgical network includes a self-configuring bus. Rather, the Bauer does not get into the specifics of how the bus handles the configuration of devices.

However, Suzuki discloses a device-controlling network that includes a self-configuring bus (column 1, lines 4-9 and column 2, lines 34-43).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Bauer and Suzuki in order to give greater ease of use for the devices that are attached to Bauer's invention and will therefore decrease the responsibilities of the user.

33. As to claims 7, 28, 49, and 70, Suzuki and Bauer disclose the invention substantially with regard to the parent claims 6, 27, 48, and 69, and further disclose said bus is a CAN bus (column 1, lines 4-9).

34. As to claims 16, 37, 58, and 79, they are rejected by the same rationale set forth in claims 6, 27, 48, and 69's rejections.

Conclusion


35. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas J. Dailey whose telephone number is 571-270-1246. The examiner can normally be reached on Monday thru Friday; 9:00am - 5:00pm.

36. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bunjob Jaroenchonwanit can be reached on 571-272-3913. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

37. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



TJD



BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER
12/31/7